REMARKS

Claims 1-20 are all the claims pending in the application.

Claims 1-20 are rejected under 35 U.S.C. § 102(e) as being anticipated by Kifuku et al. (USP 5,740,040). Applicant herein cancels claim 3 and respectfully traverses the remaining rejections as set forth below.

As described in detail in the Request for Reconsideration filed April 3, 2001, the feature as set forth in the present invention, i.e. "means of computing an estimated value of static friction of the steering system and means of compensating for the static friction based on this estimated value of static friction" is quite distinct from the feature given in Embodiment 11 of Kifuku et al., i.e. "the static friction compensating current means (20) for calculating the static friction compensation current upon extracting the rising edge of ω_{edg}, which is differentiated value of motor angular velocity estimate being differentiated through the differential calculation means (19)."

Further, in the above reference, in the view of the inventor himself (the same as the inventor of the present invention) the "effect of the static friction of the steering system can be alleviated," but "the static friction cannot be completely compensated," depending on ω_{edg}, i.e. differential value of the motor angular velocity estimate ω. (See column 20, lines 33-38).

Although the Applicant disagrees with the Examiner's interpretation of Kifuku et al., claim 1 is amended herein to recite "computing an estimated value of static friction of the steering system based on the steering force of a driver" in order to advance prosecution in this case.

This is to say, that as depicted by the control block diagram of this system as shown in Fig. 3 of the present application, the steering force assist current for assisting the steering force of a driver is obtained from the steering torque, and also the static friction of the steering system is estimated based on this steering torque. The steering force assist current for compensating the static friction is obtained using the above estimated value of the static friction. However, in the cited reference, the system is not adapted to compensate static friction by use of the steering torques as depicted in Fig. 2 and Fig. 26.

In other words, the cited reference is directed to "alleviate the effect of the static friction depending on the motor angular velocity estimate or depending on the motor current value based on the motor angular velocity", but is not directed to compensate (or alleviate) the static friction of the steering system based on the steering force of a driver as claimed in the present invention.

Therefore, claim 1 is believed to be allowable. Also, claims 2 and 4-20 are believed to be allowable at least because of their dependence from claim 1.

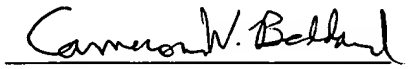
Additionally, with respect to claim 4, Applicant submits that the motor current as set forth in claim 4 is based on the steering force of the driver and is different from the motor current based on the motor angular velocity as given in the cited reference, at least because the motor detection current I_m as set forth in claim 4 contains the current based on the steering force of the driver as shown in Fig. 3 or in Embodiment 3. Thus, claim 4 is believed to be allowable for this additional reason.

In view of the foregoing, claims 1, 2, and 4-20 are now believed to be in form for allowance, and such action is hereby solicited. If any points remain in issue which the Examiner

feels may be best resolved through a personal or telephone interview, he is kindly requested to contact the undersigned at the telephone number listed below.

Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,



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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claim 3 is canceled.

The claims are amended as follows:

1. (Twice Amended) An electric power steering system for driving a motor connected to a steering system based on a steering force detection value obtained by detecting the steering force of a driver to assist the steering force of the steering system, the system comprising:

a means of computing an estimated value of static friction of the steering system based on the steering force of a driver; and

a means of compensating for the static friction based on this estimated value of static friction.